

**REMEDIAL DESIGN/REMEDIAL ACTION**  
**STATEMENT OF WORK**  
**PHILIP SERVICES CORPORATION (THERMALKEM)**  
**STATE SUPERFUND SITE**  
**York County, South Carolina**

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## 1. INTRODUCTION

- 1.1 Purpose of the SOW.** This Statement of Work (SOW) sets forth the procedures and requirements for implementing the Remedial Action (RA) at the Philip Services Corporation (ThermalKem) Site located at 2324 Vernsdale Road, Rock Hill, York County, South Carolina (Site) as described in the June 2016 Record of Decision (ROD) for the Site, to achieve the Performance Standards set forth in the Consent Decree (Consent Decree) between the South Carolina Department of Health and Environmental Control (Department), the Philip Services Site PRP Group (PRP Group), and the United States of America. The PRP Group includes Work Parties, Cash Out Settlers, and Re-Opener Settlers as defined more fully in the Consent Decree. The Performance Standards are the remedial levels and other measures of achievement of the RA as identified in Section 8.0 of the ROD, including the Remedial Goals (“RGs”) for soil and groundwater (Tables 3-4 and 3-5 of the ROD).
- 1.2 Structure of the SOW.**
- Section 2 (Community Involvement) sets forth the Department’s and Work Parties’ responsibilities for community involvement.
  - Section 3 (Remedial Design) sets forth the process for developing the Remedial Design (RD), which includes the submission of specified primary deliverables.
  - Section 4 (Remedial Action) sets forth requirements regarding the completion of the RA, including primary deliverables related to completion of the RA.
  - Section 5 (Reporting) sets forth Work Parties’ reporting obligations.
  - Section 6 (Deliverables) describes the content of deliverables and the general requirements regarding Work Parties’ submission of, and the Department’s review of, comment on, and approval of the deliverables.
  - Section 7 (Schedules) sets forth a schedule for implementing the RD/RA, a schedule for submitting the primary deliverable for the RD, specifies the Supporting Deliverables that are to accompany certain deliverables, and sets forth that, after the initial primary deliverable for the RD, the schedule for submittal of deliverables will be included in future submittals for the Department’s review and approval.
  - Section 8 (References) provides a list of references, including uniform resource locator (URLs) as available.
- 1.3** The Scope of the RA includes the following components as described in Section 11.0 of the ROD and as modified in this SOW by mutual agreement of the Department and the Work Parties:
- Excavation and offsite disposal of soil that is located outside of the Volatile Organic Compound (VOC) treatment areas that contain concentrations of metals exceeding RGs and exceeding the Department-approved background levels.

- The ROD contemplated Soil Vapor Extraction (SVE) in the Burn Pits Area, if necessary, based on the results of Preliminary Design Investigations (PDIs). PDIs completed in 2014 and 2018 by the Work Parties indicate that there are no soil impacts in the Burns Pits Area above RGs. Therefore, SVE in the Burn Pits area will not be part of the RA.
- Multi-Phase Extraction (MPE) with chemical or physical enhancements, or other applicable technologies as approved by the Department, in portions of the Fuel Oil Area where liquid phase hydrocarbon is present. The Department agrees that thermally-enhanced MPE will not be required in the Fuel Oil Area; however, *in situ* thermal treatment may be necessary in select areas within the Fuel Oil Area to address total chlorinated VOCs greater than 1 ppm. The Department agrees *in situ* thermal treatment will not be required in any portion of the Fuel Oil Area where total chlorinated VOCs are demonstrated to be less than 1 ppm.
- *In situ* thermal treatment in select areas to treat VOCs in soil and regolith groundwater. A temporary engineered cover in areas outside the building foundation may be used to enhance the thermal treatment. A temporary cover shall not justify the application of alternate dilution attenuation factors (DAF) to determine thermal treatment end points.
- Hydraulic containment, with onsite physical/chemical treatment for the regolith and bedrock hydraulic zones, if necessary, after completion of the *in situ* thermal treatment, to limit the migration of compounds in groundwater.
- Monitored natural attenuation (MNA) may follow the other remedial measures. As indicated in the ROD, MNA may be warranted after active remediation in areas where compounds are above RGs after the active remedy or to verify that concentrations of compounds remediated below RGs remain below RGs. If MNA is not demonstrated to be effective during a period of MNA monitoring (final timeframe to be determined based on Treatability Study results and additional groundwater monitoring), then additional active remediation may be warranted.
- Groundwater and surface water monitoring.
- Institutional controls.

Figure 5-6 of the ROD (Attachment A) outlines the conceptual remedial areas for the components of the RA. A map prepared by the Department, previously provided to the Work Parties on March 26, 2018, identifying primary “source areas” for consideration of *in situ* thermal treatment is included as Attachment B. The remedial areas will be refined during RD and may be further refined during implementation of the RA based upon information and data collected during the RA, subject to the Department’s approval. The RD may include sequencing of various elements of the RA, so that the anticipated benefits associated with one element can be evaluated and taken into account in the

implementation of subsequent elements. Revisions in scope of the “source areas” in the March 26, 2018 map will be based upon further assessment and/or evaluation in accordance with scientifically valid methods and principles and will be subject to Department approval.

- 1.4 The terms used in this SOW that are defined in CERCLA, 42 U. S. C. § 9601, in regulations promulgated under CERCLA, or in the Consent Decree have the meanings assigned to them in CERCLA, in such regulations, or in the Consent Decree, except that the term “Paragraph” or “¶” means a paragraph of the SOW, and the term “Section” means a section of the SOW, unless otherwise stated. If there is a conflict between definitions in CERCLA, the regulations promulgated pursuant to CERCLA, and the Consent Decree, the definition in the Consent Decree shall apply.

## 2. COMMUNITY INVOLVEMENT

### 2.1 Community Involvement Responsibilities

- (a) The Department has the lead responsibility for developing and implementing community involvement activities at the Site. Previously during the RI/FS phase, the Department developed a Community Involvement Plan (CIP). Pursuant to 40 C.F.R. § 300.435(c), the Department will review the existing CIP and determine whether it should be revised to describe further public involvement activities during the RD/RA that are not already addressed or provided for in the existing CIP. The CIP shall not be inconsistent with the NCP and the Department’s guidance and practices.
- (b) If requested by the Department, the Work Parties shall participate in community involvement activities pursuant to the CIP, including participation in (1) the preparation of information regarding the RA for dissemination to the public, and (2) public meetings that may be held or sponsored by the Department to explain activities relating to the RA. The Work Parties’ support of the Department’s community involvement activities may include providing electronic copies of deliverables to (1) Community Advisory Groups, (2) Technical Assistance Grant recipients and their advisors, and (3) other entities identified by the Department, to provide them with a reasonable opportunity for review and comment. The Department’s CIP may describe the Work Parties’ responsibilities for community involvement activities. Community involvement activities conducted by the Work Parties at the Department’s request are subject to the Department’s oversight. The Department has established a community information repository at the York County Library – Rock Hill Branch, 138 Black Street, Rock Hill, SC 29730, to house a copy of the administrative record.
- (c) **Work Parties’ CI Coordinator.** If requested by the Department, the Work Parties shall, within 60 days, designate and notify the Department of the Work Parties’ Community Involvement Coordinator (Work Parties’ CI Coordinator).

At the time of the Department's request, the Department will identify the name of the Department's CI Coordinator. The Work Parties may designate a contractor as its CI Coordinator. The Work Parties' notice must include the name, title, and qualifications of the Work Parties' CI Coordinator. The Work Parties' CI Coordinator is responsible for providing support regarding the Department's community involvement activities pursuant to the CIP, including coordinating with the Department's CI Coordinator regarding responses to the public's inquiries about the Site.

### 3. REMEDIAL DESIGN

**3.1 RD Work Plan.** The Work Parties shall submit a RD Work Plan (RDWP) for the Department's approval. The RDWP shall include:

- (1) Plans for implementing the RD activities identified in this SOW and in the RDWP, including, for example, a forecasted schedule, with explanatory notes, for completion of RD and RA activities;
- (2) A description of the overall strategy for preparing the RD, including information about remedial technologies sequencing of the RA, if appropriate and applicable;
- (3) A description of the proposed general approach to contracting, construction, operation, maintenance, and monitoring of the RA;
- (4) A description of the responsibility and authority of organizations and key personnel involved with the development of the RD;
- (5) Descriptions of areas warranting clarification and/or anticipated problems (*e.g.*, data gaps);
- (6) A plan for temporary shutdown, and, if practical, preservation of the existing pump and treat system components during the *in situ* thermal treatment, and potential start-up of the hydraulic containment system following *in situ* thermal treatment if necessary;
- (7) Description of proposed additional Pre-Design Investigation (PDI);
- (8) Description of proposed Treatability Studies, if any;
- (9) Descriptions of applicable permitting, permitting equivalence, and other regulatory requirements;
- (10) Evaluation of the need for and extent of building demolition to implement the RA;

- (11) Submittal of final, executed property access agreements or other instruments required for obtaining access in connection with the RA and the additional RD on-site activities;
- (12) Submittal of the additional PDI Work Plan(s); and
- (13) Description of the Work Parties' Technical Memorandum (TM) approach. TMs may be used by the Work Parties to describe recommended changes or additions in RD/RA implementation tasks, the scope and details of which would be conceived during the actual conduct of the activities. TMs will be subject to approval by the Department.

**3.2 Pre-Design Investigation.** The purpose of the PDI is to address data gaps by conducting additional field investigations, and perform associated PDI-related computations, prior to preparation of the RD.

- (a) **PDI Work Plan.** The Work Parties shall submit a PDI Work Plan (PDIWP) for the Department's approval. The PDIWP shall include:
  - (1) An evaluation and summary of existing data and description of data gaps;
  - (2) A sampling plan, including media to be sampled, sample analytical parameters, location of samples (areal extent and depths), and number of samples;
  - (3) A proposed schedule for completion of the PDI activities and submittal of the PDI Evaluation Report to the Department; and
  - (4) The following Supporting Deliverables as described in ¶ 6.6(d): Health and Safety Plan (HASP), Quality Assurance Project Plan (QAPP), and Field Sampling Plan (FSP).
- (b) **PDI Evaluation Report.** Following the PDI, the Work Parties shall submit a PDI Evaluation Report for the Department's review, comment, and approval. This report shall include:
  - (1) Summary of the investigations performed;
  - (2) Summary of investigation results;
  - (3) Summary of validated data (*i.e.*, tables and graphics);
  - (4) Data validation reports and laboratory data reports;
  - (5) Narrative interpretation of data and results;

- (6) Results of statistical and modeling analyses, if performed;
  - (7) Representative photographs documenting the field work conducted;
  - (8) Conclusions concerning how the data may affect the RD; and
  - (9) A schedule for submittal of the Treatability Study Work Plan (TSWP), if any, not to exceed sixty (60) days from Department approval of the PDI Evaluation Report.
- (c) The Department may require the Work Parties to supplement the PDI Evaluation Report and/or to perform additional pre-design investigations.

### **3.3 Treatability Studies**

Performance of a Treatability Study (TS) is not a requirement of the SOW. The Work Parties may perform one or more TS(s) to evaluate the efficacy, cost, performance data, and design parameters for components of the RA. Should a TS be performed by the Work Parties, the following requirements shall apply:

- (a) The Work Parties shall submit a TSWP for the Department's approval. The Work Parties shall prepare the TSWP in accordance with EPA's *Guide for Conducting Treatability Studies under CERCLA, Final* (Oct. 1992), as supplemented for RD by the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995) and include the following:
  - (1) Descriptions of the treatment technologies to be evaluated;
  - (2) Objectives of the study(ies);
  - (3) Type of treatability tests to be performed (bench scale, field scale);
  - (4) Equipment, materials, and contractors to be used;
  - (5) Sampling and analysis to be performed as part of the test(s);
  - (6) Permitting requirements;
  - (7) Residuals management;
  - (8) Data management and interpretation;
  - (9) Schedule for performance of the study(ies) and submittal of the TS Evaluation Report; and

- (10) Updates to the following Supporting Deliverables, if warranted, for the TS activities: Health and Safety Plan (HASP), Quality Assurance Project Plan (QAPP), and Field Sampling Plan (FSP).
- (b) Following completion of the TS, the Work Parties shall submit a TS Evaluation Report for the Department's review, comment, and approval. The TS Evaluation Report shall include the following:
  - (1) Description of the treatability study(ies) performed;
  - (2) Deviations from the TSWP, if warranted;
  - (3) Summary and evaluation of the data collected;
  - (4) Laboratory and/or contractor treatability test reports;
  - (5) Conclusions of the treatability study(ies) in terms of the efficacy, cost implications, performance, and design parameters for components of the RA;
  - (6) An evaluation of the need for additional or follow-up data collection or treatability study(ies); and
  - (7) A schedule for additional data collection or treatability study(ies) or for preparation and submittal of the Preliminary (30%) RD.
- (c) The Department may require the Work Parties to supplement the TS Evaluation Report and/or to perform additional treatability studies.

**3.4 Preliminary (30%) RD.** The Work Parties shall submit a Preliminary (30%) RD for the Department's review, comment, and approval. The Preliminary (30%) RD shall include:

- (a) A design criteria report, as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995);
- (b) Preliminary drawings and specifications;
- (c) Descriptions of permit requirements and permitting equivalence, as applicable;
- (d) A description of voluntary practices that may be implemented to reduce the environmental footprint of the remedy in general accordance with ASTM E2893-16, Standard Guide for Greener Cleanups, ASTM International, West Conshohocken, PA 19428-2959, [www.astm.org](http://www.astm.org);
- (e) A description of monitoring and control measures to protect human health and the environment, such as air monitoring and dust suppression, during the RA;

- (f) Plans for demolition of Site buildings, if warranted to implement components of the RA;
- (g) Plans for sequencing elements of the RA, which will be described for each remedial technology with specific objectives to make informed decisions regarding performance of individual technologies and when to transition remedial actions from one technology to another. Precise sequencing will be determined during RA based on performance metrics for each active remedial technology established during the RD and the TS, and will be subject to the Department's approval;
- (h) Methods and locations to measure performance of the RA elements, monitor the remedial systems and track treatment progress;
- (i) Proposed interim remediation goals developed using results from the PDI, modeling and treatability studies (as warranted) for environmental media, which will be used to determine when the active remedial component of a specific remedy may be terminated;
- (j) A schedule for submittal of the Pre-Final RD after Department review, comment, and approval of the Preliminary (30%) RD;
- (k) Submittal of the following Supporting Deliverables described in ¶ 6.6: Emergency Response Plan; Site-Wide Monitoring Plan; Construction Quality Assurance/Quality Control Plan; Institutional Controls Implementation and Assurance Plan; and Transportation and Off-Site Disposal Plan; and
- (l) Updates of the following Supporting Deliverables, as warranted, for the RA: HASP, FSP and QAPP.

**3.5 Pre-Final (90%) RD.** The Work Parties shall submit the Pre-Final (90%) RD for the Department's review, comment, and approval. The Pre-Final RD shall be a continuation and expansion of the previous design submittal and shall address the Department's comments regarding the Preliminary (30%) RD. The Pre-Final RD will serve as the approved Final (100%) RD if the Department approves the Pre-Final RD without comments. The Pre-Final RD shall include:

- (a) A complete set of construction drawings and specifications that are: (1) certified by a South Carolina registered professional engineer; and (2) suitable for RA procurement;
- (b) A survey and engineering drawings showing existing Site features, such as elements, property borders, easements, and Site conditions;

- (c) Pre-Final versions of the same elements and deliverables as are required for the Preliminary (30%) RD;
- (d) A specification for photographic documentation of the RA;
- (e) Preliminary Operation and Maintenance (O&M) Manual; and
- (f) Updates of the Supporting Deliverables, as warranted, for those deliverables that accompanied the Preliminary (30%) RD.

**3.6 Final (100%) RD.** The Work Parties shall submit the Final (100%) RD for the Department's approval. The Final (100%) RD shall address the Department's comments on the Pre-Final (90%) RD and shall include final versions of the Pre-Final (90%) RD deliverables. The Final (100%) RD submittal will include a schedule for submittal of the RA Work Plan.

#### 4. REMEDIAL ACTION

**4.1 RA Work Plan.** The Work Parties shall submit a RA Work Plan (RAWP) for the Department's approval that includes:

- (a) A proposed RA Construction Schedule;
- (b) An updated HASP that covers activities during the RA;
- (c) O&M Manual;
- (d) Plans for satisfying permitting requirements, including obtaining permits for off-site activity and for satisfying substantive requirements of permits for on-site activity, if any; and
- (e) In the absence of a designated Independent Quality Assurance Team (IQAT), the Work Parties must demonstrate how the IQAT objectives will be met as part of the RA.

#### 4.2 Meetings and Inspections

- (a) **Preconstruction Conference.** The Work Parties shall hold a preconstruction conference with the Department, and others as requested by the Department, as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995). The Preconstruction Conference shall be held at the Site. The Work Parties shall prepare minutes of the conference and shall distribute the minutes to the Department and other attendees of the conference for their information.
- (b) **Periodic Meetings.** During RA Construction, the Work Parties shall conference with the Department monthly, unless an alternative frequency is agreed upon with

the Department, to discuss construction status. The Work Parties shall distribute an agenda prior to each conference. The conferences may be held via phone or in-person as agreed to by the Work Parties and the Department. The Work Parties shall prepare minutes of the meetings and shall distribute the minutes to the Department and other attendees of the meeting for their information.

(c) **Inspections**

- (1) The Work Parties shall conduct inspections of the RA Construction activities in accordance with the CQA/QCP.
- (2) The Department or its representative shall conduct periodic inspections of the Work. At the Department's request, the Supervising Contractor or other Work Party designee shall accompany the Department or its representative during inspections.
- (3) Within 30 days of receipt of written notification by the Department of any deficiencies in the RA Construction (as defined in ¶ 4.5), the Work Parties shall prepare a written response to the notification including, if warranted, steps already taken to address the alleged deficiency or steps that will be taken to address the alleged deficiency, including a schedule for implementation.

### 4.3 **Emergency Response and Reporting**

- (a) Emergency Response and Reporting required under ¶ 4.3 shall not relieve the Work Parties or its contractors from release response and reporting mandated by other federal, state, or local authorities that are not specifically mentioned in ¶ 4.3.
- (b) **Emergency Response and Reporting.** If an event occurs during performance of the RD/RA that causes a release or threatened release of Hazardous Substances on, at, or from the Site and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, the Work Parties shall: (1) immediately take appropriate action to prevent, abate, or minimize such release or threat of release; (2) immediately notify the authorized Department officer (as specified in ¶ 4.3(c)) orally, unless immediate notification is impractical due to hazardous or other conditions, in which case the verbal notification shall be made as soon as practicable; and (3) take such actions in consultation with the authorized Department officer and in accordance with applicable provisions of the HASP, the Emergency Response Plan, and other applicable deliverable(s) approved by the Department under the SOW.
- (c) **Release Reporting.** Upon the occurrence of an event during performance of the RD/RA that the Work Parties are required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and

Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004, the Work Parties shall, in addition to the required notifications, within 24 hours notify the authorized Department officer orally as identified in ¶ 4.3(c)).

- (d) The “authorized Department officer” for purposes of immediate oral notifications and consultations under ¶ 4.3(a) and ¶ 4.3(b) is the Department’s Division of Emergency Response (888-481-0125). Verbal or email notification shall also be provided to the Department’s Project Manager for the Site within 24 hours.
- (e) For any event covered by ¶ 4.3(a) and ¶ 4.3(b), the Work Parties shall: (1) within 15 days after the onset of such event, submit a report to the Department describing the actions or events that occurred and the measures taken, and to be taken, in response thereto; and (2) within 30 days after the conclusion of such event, submit a report to the Department describing actions taken in response to such event.
- (f) The reporting requirements under ¶ 4.3 are in addition to the reporting required by CERCLA § 103 or EPCRA § 304.

#### **4.4 Off-Site Shipments**

- (a) The Work Parties may ship Hazardous Substances from the Site to an off-Site facility only if the facility provides notice to the Work Parties and the Department that it is in compliance with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440.
- (b) The Work Parties may ship Hazardous Substances from the Site to an out-of-state waste management facility only if, prior to any shipment, the Work Parties provide notice to the appropriate state environmental official in the receiving facility’s state and to the Department’s Project Manager. This notice requirement will not apply to any off-Site shipments when the total quantity of such shipment does not exceed 10 cubic yards. The notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Hazardous Substances to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. The Work Parties also shall notify the state environmental official referenced above and the Department’s Project Manager of any major changes in the shipment plan, such as a decision to ship the Hazardous Substances to a different out-of-state facility. The Work Parties shall provide the notice before the Hazardous Substances are shipped.
- (c) The Work Parties may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, and in general accordance with *EPA’s Guide to Management of Investigation Derived Waste*, OSWER 9345.3-03FS

(Jan. 1992). Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 CFR § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.

#### 4.5 Certification of RA Construction Completion

- (a) For purposes of this SOW, “RA Construction Element” means any specific element of the RA that involves the construction and operation of a system to achieve Performance Standards and “RA Construction” comprises, for each RA Construction Element, the construction of such system and the performance of activities necessary for the system to function properly and as designed. Each RA Construction Element shall be identified in the RD but may be modified with Department approval during implementation of the RA based upon information collected during RA activities.
- (b) **Inspection of Constructed Remedy.** After completion of construction of each RA Construction Element, the Work Parties shall schedule an inspection with the Department to review the construction and operation of the system and to review whether the system is functioning properly and as designed. The inspection shall be attended by the Work Parties and the Department and/or their representatives. If the Department determines that there are deficiencies in RA Construction in accordance with ¶ 4.5(d), the Department may request that a re-inspection be conducted after the Work Parties have addressed the deficiencies.
- (c) **RA Report.** Within 90 days following the Department’s inspection of each RA Construction Element in accordance with ¶ 4.5 (b), the Work Parties shall submit an “RA Report” requesting the Department’s determination that construction of that RA Construction Element has been completed. The RA Report must:
  - (1) include statements by a South Carolina registered professional engineer and by the Work Parties’ Project Coordinator that construction of the RA Construction Element is complete and that the RA Construction Element is functioning properly and as designed;
  - (2) include documentation that construction of the RA Construction Element is complete and that the RA Construction Element is functioning properly and as designed;
  - (3) include as-built drawings signed and stamped by a South Carolina registered professional engineer;
  - (4) be prepared in accordance with Chapter 2 (Remedial Action Completion) of EPA’s *Close Out Procedures for NPL Sites* guidance (May 2011); and
  - (5) be certified in accordance with ¶ 6.4 (Certification).
- (d) If the Department determines that an RA Construction Element is not complete, the Department will so notify the Work Parties in writing. The Department’s notice will state with specificity the rationale as to why the RA Construction Element is incomplete and a description of the activities that the Work Parties

shall perform to obtain the Department's concurrence. Within 30 days of receipt of written notification by the Department of deficiencies in the RA Construction, the Work Parties shall prepare a written response to the notification including, if warranted, steps already taken to address the alleged deficiency or steps that will be taken to address the alleged deficiency, including a schedule for implementation and resubmission of the RA Report.

- (e) If the Department determines, based on an initial or subsequent RA Report, that an RA Construction Element is complete, the Department will so notify the Work Parties in writing.
- (f) Within 30 days following the Department's concurrence that the RA Reports are complete for each of the RA Construction Elements, the Department will issue a Certification of RA Construction Completion for that specific RA Construction Element.

#### **4.6 Certification of Active RA Completion**

- (a) For purposes of this ¶ 4.6, an "active remedy" is one that involves actions to reduce the mass, concentration, toxicity, or mobility of the Site compounds of concern as identified in the ROD Tables 3-4 and 3-5.
- (b) If the Work Parties determine that active remediation by one or more RA Construction Elements is complete, the Work Parties may prepare a report requesting the Department's certification that such active remedies are complete for that element (Certification of Active RA Completion). A request for Certification of Active RA Completion may be prepared for any active remedy component of the RA (*e.g.*, completion of soil excavation, completion of *in situ* thermal treatment, completion of MPE, completion of MPE with chemical or physical enhancements or other approved technologies, operation of groundwater extraction and treatment system). The report must: (1) include certifications by a South Carolina registered professional engineer and by the Work Parties' Project Coordinator that the active component of the RA is complete; (2) be prepared in accordance with Chapter 3 (Construction Completion) of EPA's *Close Out Procedures for NPL Sites* guidance (May 2011); (3) contain monitoring or other data to demonstrate that active remediation of an RA component has achieved the active remedial goals established for that RA Construction Element in the RD; (4) if RGs have not been met at the time of the request for Certification of Active RA Completion, include a plan for post-active MNA monitoring and a contingency for additional active remediation if RGs are not projected to be met in a timeframe approved by the Department following the period of initial MNA monitoring; and (5) be certified in accordance with ¶ 6.4 (Certification).
- (c) If the Department concludes that an active remedy component of the RA is not complete, the Department will so notify the Work Parties. The Department's

notice will state with specificity the rationale as to why the active remedy component of the RA is not complete and a description of the activities that Work Parties may perform to obtain the Department's concurrence. The Work Parties may resubmit the request for Certification of Active RA Completion based upon the Department's comments or after collecting additional information or data to support the certification.

- (d) If the Department concludes, based on the initial or any subsequent request for Certification of Active RA Completion, that such an active remedy component of the RA is complete, the Department will so certify to the Work Parties in writing. Issuance of any Certification of Active RA Completion does not affect the continuing obligations of the Consent Decree.

**4.7 Periodic Review Support Plan (PRSP).** The Work Parties shall submit the PRSP for the Department's approval. The PRSP addresses the studies and investigations that the Work Parties shall conduct to support the Department's reviews of whether the RA is protective of human health and the environment in accordance with Section 121(c) of CERCLA, 42 U.S.C. § 9621(c) (also known as "Five-year Reviews"). The Work Parties shall develop the PRSP in accordance with *Comprehensive Five-year Review Guidance*, OSWER 9355.7-03B-P (June 2001).

#### **4.8 Certification of Work Completion**

- (a) **Final Monitoring Report.** Within 90 days following the achievement of Performance Standards, the Work Parties shall submit a Final Monitoring Report to the Department demonstrating that the Performance Standards have been met. The report must: (1) include certifications by a South Carolina registered professional engineer and by the Work Parties' Project Coordinator that the Performance Standards have been met; (2) contain monitoring data to demonstrate that Performance Standards have been met; and (3) be certified in accordance with ¶ 6.4 (Certification).
- (b) **Work Completion Inspection.** The Work Parties and the Department will perform an inspection for the purpose of obtaining the Department's certification of work completion (Certification of Work Completion). The inspection must be attended by the Work Parties and the Department and/or their representatives.
- (c) **Work Completion Report.** Within 90 days following the inspection, the Work Parties shall submit a report to the Department requesting the Department's Certification of Work Completion (Work Completion Report). The report must: (1) include certifications by a South Carolina registered professional engineer and by the Work Parties' Project Coordinator that the Work, including all O&M activities, is complete; and (2) be certified in accordance with ¶ 6.4 (Certification). If the Monitoring Report submitted under ¶ 4.6(a) includes the

elements required under this ¶ 4.8(c), then the Monitoring Report suffices to satisfy the requirements under this ¶ 4.8(c).

- (d) If after completion of the inspection and review of the Work Completion Report the Department concludes that the RA is not complete, the Department will so notify the Work Parties in writing. The Department's notice must include the rationale as to why the RA is not complete and a description of the activities that Work Parties may perform to obtain the Department's Certification of Work Completion. Within 90 days of receipt of written notification by the Department, the Work Parties shall prepare a written response to the notification including, if warranted, steps already taken to address the Department's notice or steps that will be taken to address the Department's notice, including a schedule for implementation and resubmission of the Work Completion Report.
- (e) If the Department concludes, based on the initial or any subsequent report requesting Certification of Work Completion, that the Work is complete, the Department will so certify in writing to the Work Parties. Issuance of the Certification of Work Completion does not affect any continuing obligations of the Consent Decree.

## **5. REPORTING**

**5.1 Progress Reports.** Commencing thirty days after the end of the quarter following the Effective Date of the Consent Decree and until the Department issues the Certification of RA Construction Completion, the Work Parties shall submit progress reports to the Department on a quarterly basis, or as otherwise approved by the Department. The reports must cover all activities that took place during the prior reporting period, including:

- (a) A summary of actions that have been taken toward achieving compliance with the Consent Decree;
- (b) A summary of results of sampling, tests, and all other data received or generated by the Work Parties;
- (c) A description of deliverables that the Work Parties submitted to the Department;
- (d) A description of expected activities relating to RA Construction that are scheduled for the next quarter;
- (e) An updated RA Construction Schedule, together with information regarding percentage of completion, delays encountered or anticipated that may affect the future schedule for implementation of the RA, and a description of efforts made to mitigate those delays or anticipated delays;

- (f) A description of modifications to the work plans or other schedules that the Work Parties have proposed or that have been approved by the Department; and
- (g) A description of activities undertaken at the Department's request in support of the Community Involvement Plan (CIP) during the reporting period and those to be undertaken in the next quarter.

**5.2 Notice of Progress Report Schedule Changes.** If the schedule for any activity described in the Progress Reports, including activities described under ¶ 5.1(d), changes, the Work Parties shall notify the Department of such change at least seven calendar days before performance of the activity.

## **6. DELIVERABLES**

**6.1 Applicability.** The Work Parties shall submit deliverables for the Department's information, review, comment, approval, or in support of work certification as specified in the SOW. If none is specified, the deliverable does not require the Department's approval or comment. Paragraphs 6.2 (In Writing) through 6.3 (General Requirements for Deliverables) apply to all deliverables. Paragraph 6.4 (Certification) applies to any deliverable that is required to be certified. Paragraph 6.5 (Approval of Deliverables) applies to any deliverable that is required to be submitted for the Department's approval.

**6.2 In Writing.** Deliverables under this SOW shall be in writing unless otherwise specified.

**6.3 General Requirements for Deliverables.** Deliverable shall be submitted in accordance with the deadlines in the RD Schedule in ¶ 7.2 and the RA Schedule in ¶ 7.3. The Work Parties shall submit deliverables to the Department in the form of (i) one hard copy paper form and (ii) one electronic copy via electronic media (*e.g.*, compact disk or "flash drive"), email or placement in a secure, cloud content management and file sharing service established solely for the Department's use and managed by the Work Parties. If electronic media such as compact disk or flash drives are used, they must be new.

**6.4 Certification.** Deliverables that require compliance with this ¶ 6.4 must be signed by the Work Parties' Project Coordinator, or other responsible official of the Work Parties, and must contain the following statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting

false information, including the possibility of fine and imprisonment for knowing violations.

## **6.5 Approval of Deliverables**

### **(a) Initial Submissions.**

The Department shall timely review any deliverable that is required to be submitted for the Department's approval under the Consent Decree or the SOW. In light of such review, the Department will, in writing: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing. Any notice of disapproval under (iii) or (iv) above, or notice of approval upon specified conditions under (ii) above, will state with specificity the rationale as to why the deliverable is not approved or why it is approved with conditions and include a description of the activities that the Work Parties shall perform to obtain the Department's full approval.

### **(b) Resubmissions.**

- (1) Upon receipt of a written notice of disapproval under ¶ 6.5(a) (Initial Submissions), or if required by a written notice of approval upon specified conditions under ¶ 6.5(a), the Work Parties shall, within thirty (30) days or such longer reasonable timeframe specified by the Department in such written notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, the Department will, in writing: (i) approve, in whole or in part, the resubmission; (ii) approve the resubmission upon specified conditions; (iii) disapprove, in whole or in part, the resubmission, requiring the Work Parties to correct the deficiencies; or (iv) any combination of the foregoing. Any notice of disapproval under (iii) or (iv) above, or notice of approval upon specified conditions under (ii) above, will state with specificity the rationale as to why the deliverable is not approved or why it is approved with conditions and include a description of the activities that the Work Parties may perform to obtain the Department's full approval.
- (2) Upon receipt of a written notice of disapproval under ¶ 6.5(b) (Resubmissions), or if required by a written notice of approval upon specified conditions under ¶ 6.5(b), the Work Parties shall correct the deficiencies and again resubmit the deliverable for approval pursuant to the procedure set forth in ¶ 6.5(b)(1). Notwithstanding the foregoing, after the initial document submittal and two revisions of that submittal, the Department may modify the second or any subsequent resubmission to cure deficiencies in such resubmission if: (i) the Department determines that disapproving the resubmission and awaiting another resubmission

would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable. Such determination shall be reasonable.

- (c) **Implementation.** Upon approval or approval upon conditions or modification by the Department under ¶ 6.5(a) (Initial Submissions), or ¶ 6.5(b) (Resubmissions), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, shall be incorporated into and enforceable under the Consent Decree; and (2) the Work Parties shall take the action identified by such deliverable, or portion thereof, subject to the Work Parties' right to invoke dispute resolution procedures set forth in the Consent Decree with respect to modifications of conditions made by the Department. The implementation of a non-deficient portion of a deliverable submitted or resubmitted under ¶ 6.5(a) does not relieve the Work Parties of any requirement to resubmit the deficient part of the deliverable.

**6.6 Supporting Deliverables.** The Work Parties shall submit each of the following supporting deliverables for the Department's approval, except as specifically provided. The Work Parties shall develop the deliverables in accordance with applicable regulations, guidance documents, and policies (see Section 8 (References)). The Work Parties shall update the supporting deliverables as necessary or appropriate during the course of the RD/RA, and/or as requested by the Department.

- (a) **Health and Safety Plan.** The Health and Safety Plan (HASP) describes activities to be performed to protect onsite personnel and area residents from physical, chemical, and other hazards posed by the RD/RA. The Work Parties shall develop the HASP in accordance with EPA's Emergency Responder Health and Safety and Occupational Safety and Health Administration (OSHA) requirements under 29 C.F.R. §§ 1910 and 1926. The HASP should cover RD activities and should be, as appropriate, updated to cover activities during the RA and updated to cover activities after RA completion. The Department does not approve the HASP, but will review it to ensure that necessary elements are included and that the plan provides for the protection of human health and the environment. The Department expressly disclaims any and all liability that may result from implementation of the Health and Safety Plan by the Work Parties.
- (b) **Emergency Response Plan.** The Emergency Response Plan (ERP) shall describe procedures to be used in the event of an accident or emergency at the Site (for example, weather-related emergencies, power outages, water impoundment failure, treatment plant failure, slope failure, etc.). The ERP shall include:
- (1) Name of the person or entity responsible for responding in the event of an emergency incident;

- (2) Plan and date(s) for meeting(s) with the local community, including local, State, and federal agencies involved in the cleanup, as well as local emergency response squads and hospitals;
  - (3) Spill Prevention, Control, and Countermeasures (SPCC) Plan (if applicable), consistent with the regulations under 40 C.F.R. Part 112, describing measures to prevent, and contingency plans for, spills and discharges;
  - (4) Notification activities in accordance with ¶ 4.3(b) (Release Reporting) in the event of a release of Hazardous Substances requiring reporting under Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004; and
  - (5) A description of necessary actions to ensure compliance with Article XI (Project Manager/Coordinator) at Paragraph 44 (Authority of the Department's Project Manager) of the Consent Decree in the event of an occurrence during the performance of the Work that causes or threatens a release of Hazardous Substances from the Site that constitutes an emergency or may present an immediate threat to public health or welfare or the environment.
- (c) **Field Sampling Plan.** The Field Sampling Plan (FSP) addresses sample collection activities. The FSP shall be written so that a field sampling team unfamiliar with the project would be able to gather the samples and field information required. The Work Parties shall develop the FSP in accordance with *Guidance for Conducting Remedial Investigations and Feasibility Studies*, EPA/540/G 89/004 (Oct. 1988).
- (d) **Quality Assurance Project Plan.** The Quality Assurance Project Plan (QAPP) augments the FSP and addresses sample analysis and data handling regarding the RD/RA. The QAPP must include a detailed explanation of Work Parties' quality assurance, quality control, and chain of custody procedures for pre-design, treatability, design, compliance, and monitoring samples. The Work Parties shall develop the QAPP in accordance with *EPA Requirements for Quality Assurance Project Plans*, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006); *Guidance for Quality Assurance Project Plans.*, QA/G-5, EPA/240/R 02/009 (Dec. 2002); and *Uniform Federal Policy for Quality Assurance Project Plans*, Parts 1-3, EPA/505/B-04/900A through 900C (Mar. 2005). The QAPP also must include procedures:
- (1) To ensure that the Department and its authorized representatives have reasonable access to laboratories used by the Work Parties in implementing the Consent Decree (Work Parties' Labs);

- (2) To ensure that Work Parties' Labs analyze all samples submitted by the Department pursuant to the QAPP for quality assurance monitoring;
  - (3) To ensure that Work Parties' Labs perform all analyses using EPA-accepted methods (*i.e.*, the methods documented in *EPA Contract Laboratory Program Statement of Work for Inorganic Analysis*, ILM05.4 (Dec. 2006); *EPA Contract Laboratory Program Statement of Work for Organic Analysis*, SOM01.2 (amended Apr. 2007); and *EPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration)*, ISM01.2 (Jan. 2010)) or other methods acceptable to the Department;
  - (4) To ensure that Work Parties' Labs are certified and current in the Department's Environmental Laboratory Certification Program for the test methods employed;
  - (5) For Work Parties to provide the Department with notice at least 14 days prior to sample collection activity, unless remedy implementation or monitoring requires a shorter time frame in which case the Work Parties will provide as much notice as possible
  - (6) For Work Parties to provide split samples and/or duplicate samples to the Department upon request;
  - (7) For the Department to take additional samples that it deems necessary;
  - (8) For the Department to provide to Work Parties, upon request, split samples and/or duplicate samples in connection with the Department's oversight sampling; and
  - (9) For Work Parties to submit to the Department sampling and tests results and other data in connection with the implementation of the Consent Decree.
- (e) **Site-Wide Monitoring Plan.** The purpose of the Site-Wide Monitoring Plan (SWMP) is to obtain baseline information regarding the extent of contamination in affected media at the Site; to obtain information, through short- and long-term monitoring, about the movement of and changes in contamination throughout the Site, before and during implementation of the RA; to obtain information regarding contamination levels to determine whether an active remedy component element of the RA is complete; to obtain information regarding contamination levels to determine whether Performance Standards are achieved; and to obtain information to determine whether to perform additional actions, including further Site monitoring. The SWMP shall include:

- (1) Description of the environmental media to be monitored;
  - (2) Description of the data collection parameters, including existing and proposed monitoring devices and locations, schedule and frequency of monitoring, analytical parameters to be monitored, and analytical methods employed;
  - (3) Description of how performance data will be analyzed, interpreted, and reported, and/or other Site-related requirements;
  - (4) Description of verification sampling procedures;
  - (5) Description of deliverables that will be generated in connection with monitoring, including sampling schedules, laboratory records, and monitoring reports to be submitted to the Department; and
  - (6) If warranted, description of proposed additional monitoring and data collection actions (such as increases or decreases in frequency of monitoring, and/or installation of additional monitoring devices in the affected areas) in the event that results from monitoring devices indicate changed conditions (such as higher or lower than expected concentrations of the contaminants of concern or groundwater contaminant plume movement).
- (f) **Construction Quality Assurance/Quality Control Plan (CQA/QCP).** The purpose of the CQA/QCP is to describe planned and systemic activities that provide confidence that the RA Construction satisfies the plans, specifications, and related requirements, including quality objectives. The CQA/QCP shall:
- (1) Identify, and describe the responsibilities of and the organizations and personnel implementing the CQA/QCP;
  - (2) Describe the Performance Standards to be met to achieve Certification of Work Completion, and the activities that will be performed to determine if Performance Standards have been met;
  - (3) Describe verification activities, such as inspections, sampling, testing, monitoring, and production controls, under the CQA/QCP;
  - (4) Describe industry standards and technical specifications used in implementing the CQA/QCP;
  - (5) Describe procedures for tracking construction deficiencies from identification through corrective action;

- (6) Describe procedures for documenting all CQA/QCP activities; and
  - (7) Describe procedures for retention of documents and for final storage of documents.
- (g) **Transportation and Off-Site Disposal Plan.** The Transportation and Off-Site Disposal Plan (TODP) describes plans to ensure compliance with ¶ 4.4 (Off-Site Shipments). The TODP must include:
- (1) Proposed routes for off-site shipment of Hazardous Substances;
  - (2) Identification of communities affected by shipment of Hazardous Substances; and
  - (3) Description of plans to minimize impacts on affected communities.
- (h) **O&M Manual.** The O&M Manual serves as a guide to the purpose and function of the equipment and systems that make up the remedy. The O&M Manual provides technical information and data, manufacturers' information, protocols, process parameters, operation procedures, staffing, training, and maintenance schedules. The Work Parties shall develop the O&M Manual in accordance with *Operation and Maintenance in the Superfund Program*, OSWER 9200.1 37FS, EPA/540/F-01/004 (May 2001). For emphasis, the O&M Manual shall also include the following items:
- (1) **O&M Reporting.** Description of records and reports that will be generated during O&M, such as operating logs, laboratory records, reports regarding emergencies, maintenance records, O&M reports, and content and schedules of reports to be submitted to the Department; and
  - (2) Description of corrective action in case of systems failure, including:
    - (i) alternative procedures to prevent the release or threatened release of Hazardous Substances which may endanger public health and the environment;
    - (ii) analysis of vulnerability and additional resource requirements should a failure occur;
    - (iii) notification and reporting requirements should O&M systems fail or be in danger of imminent failure; and
    - (iv) community notification requirements.
- (i) **Institutional Controls Implementation and Assurance Plan.** The Institutional Controls Implementation and Assurance Plan (ICIAP) describes plans to implement, maintain, and enforce the Institutional Controls (ICs) at the Site. The Work Parties shall develop the ICIAP in accordance with *Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites*, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012), and *Institutional Controls: A Guide to Preparing Institutional Controls*

*Implementation and Assurance Plans at Contaminated Sites*, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012). For emphasis, the ICIAP shall include the following additional requirements:

- (1) If applicable, locations of recorded real property interests (*e.g.*, easements, liens) and resource interests in the property that may affect ICs (*e.g.*, surface, mineral, and water rights) including accurate mapping and geographic information system (GIS) coordinates of such interests; and
- (2) Legal descriptions and survey maps that are prepared according to current American Land Title Association (ALTA) Survey guidelines and certified by a South Carolina registered licensed surveyor.

## 7. SCHEDULES

**Applicability and Revisions.** Tasks and deliverables required under this SOW shall be submitted or completed by the deadlines or within the time durations listed in the RD and RA Schedules set forth below. For deliverables, a schedule for submitting the initial primary deliverables for the RD is provided below. After the initial primary deliverables for the RD, the schedule for submittal of subsequent deliverables will be included in future submittals for the Department’s review and concurrence. During the implementation of the RD/RA, the Work Parties may submit proposed revised schedules for the Department’s approval. Upon the Department’s approval, the revised RD and/or RA Schedules supersede the RD and RA Schedules set forth below, and any previously approved RD and/or RA Schedules. The Department and the Work Parties will work cooperatively to perform the RD/RA in a reasonably expeditious manner.

<b>7.2 RD Schedule</b>			
	<b>Description of Deliverable, Task</b>	<b>SOW ¶ Ref.</b>	<b>Deadline</b>
1	Identification of Project Coordinator	CD Para. 43(a)	10 days after Consent Decree Effective Date (execution by the Court).
2	Identification of Supervising Contractor	CD Para. 11(d)	90 days after Consent Decree Effective Date (execution by the Court).
3	RDWP	3.1	120 days after the Department’s Authorization to Proceed regarding Supervising Contractor under Consent Decree ¶ <b>11(d) or (e)</b>
4	PDIWP	3.2(a)	Submittal schedule to be included in RDWP
5	FSP*	6.6(c)	To be submitted with PDIWP
6	HASP*	6.6(a)	To be submitted with PDIWP
7	QAPP*	6.6(d)	To be submitted with PDIWP

8	PDI Evaluation Report	3.2(b)	Submittal schedule to be included in PDIWP
9	TSWP	3.3(a)	Submittal schedule to be included in PDI Evaluation Report
10	TS Evaluation Report	3.3(b)	Submittal schedule to be included in TSWP
11	Preliminary (30%) RD	3.4	Submittal schedule to be included in TS Evaluation Report
12	Pre-Final (90%) RD	3.5	Submittal schedule to be included in Preliminary 30% RD
13	Final (100%) RD	3.6	Submittal schedule to be included in Pre-Final 90% RD

\* FSP, HASP, and QAPP will also be updated, if warranted, for submittal with the TSWP and RA activities.

<b>7.3 RA Schedule</b>			
	<b>Description of Deliverable / Task</b>	<b>¶ Ref.</b>	<b>Deadline</b>
1	Award RA contract		120 days after the Department Notice of Authorization to Proceed with RA
2	RAWP	4.1	Submittal schedule to be included in Final (100%) RD Schedule
3	HASP	6.6(a)	To be submitted with RAWP
4	ERP	6.6(b)	To be submitted with RD submittals
		4.3(b)	Communicate within 24 hours of release event; submit report 30 days after conclusion of event
5	SWMP	6.6(e)	To be submitted with RD submittals
6	CQA/QCP	6.6(f)	To be submitted with RD submittals
7	TODP	6.6(g)	To be submitted with RD submittals
8	Pre-Construction Conference	4.2(a)	60 days after award of RA contract
9	Start of RA Construction		Schedule to be included in RAWP
10	O&M Manual	6.6(h)	To be submitted with RAWP
11	ICIAP	6.6(i) CD Article VII	To be submitted with RD submittals
12	Inspection of Constructed Remedy	4.5(b)	For each RA Construction Element, 30 days after notification to the Department of construction completion
13	RA Report	4.5(c)	90 days following Department's inspection of RA Construction Element
14	Request for Certification of Active RA Completion	4.6	For each RA Construction Element, at any time the Work Parties determine such active remedy component is complete

15	Final Monitoring Report	4.8(a)	90 days following achievement of Performance Standards
16	Work Completion Inspection	4.8(b)	30 days after submission of the Final Monitoring Report
17	Work Completion Report	4.8(c)	90 days following Work Completion Inspection
18	Periodic Review Support Plan	4.7	Five years after Start of RA Construction, and for every five years thereafter until Certification of Work Completion is issued

## 8. REFERENCES

**8.1** The following regulations and guidance documents, among others, apply to the Work. Any item for which a specific URL is not provided below is available on one of the two EPA Web pages listed in ¶ 8.2:

- (a) A Compendium of Superfund Field Operations Methods, OSWER 9355.0-14, EPA/540/P-87/001a (Aug. 1987).
- (b) CERCLA Compliance with Other Laws Manual, Part I: Interim Final, OSWER 9234.1-01, EPA/540/G-89/006 (Aug. 1988).
- (c) Guidance for Conducting Remedial Investigations and Feasibility Studies, OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988).
- (d) CERCLA Compliance with Other Laws Manual, Part II, OSWER 9234.1-02, EPA/540/G-89/009 (Aug. 1989).
- (e) Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, OSWER 9355.5-01, EPA/540/G-90/001 (Apr. 1990).
- (f) Guidance on Expediting Remedial Design and Remedial Actions, OSWER 9355.5-02, EPA/540/G-90/006 (Aug. 1990).
- (g) Guide to Management of Investigation-Derived Wastes, OSWER 9345.3-03FS (Jan. 1992).
- (h) Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, OSWER 9355.7-03 (Feb. 1992).
- (i) Guidance for Conducting Treatability Studies under CERCLA, OSWER 9380.3-10, EPA/540/R-92/071A (Nov. 1992).

- (j) National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, 40 C.F.R. Part 300 (Oct. 1994).
- (k) Guidance for Scoping the Remedial Design, OSWER 9355.0-43, EPA/540/R-95/025 (Mar. 1995).
- (l) Remedial Design/Remedial Action Handbook, OSWER 9355.0-04B, EPA/540/R-95/059 (June 1995).
- (m) EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).
- (n) Operation and Maintenance in the Superfund Program, OSWER 9200.1-37FS, EPA/540/F-01/004 (May 2001).
- (o) Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P, 540-R-01-007 (June 2001).
- (p) Guidance for Quality Assurance Project Plans, QA/G-5, EPA/240/R-02/009 (Dec. 2002).
- (q) Institutional Controls: Third Party Beneficiary Rights in Proprietary Controls (Apr. 2004).
- (r) Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, February 2014).
- (s) Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A through 900C (Mar. 2005).
- (t) Superfund Community Involvement Handbook, SEMS 100000070 (January 2016) available at <https://www.epa.gov/superfund/community-involvement-tools-and-resources>.
- (u) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).
- (v) EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).
- (w) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (x) EPA Contract Laboratory Program Statement of Work for Inorganic Analysis, ILM05.4 (Dec. 2006).

- (y) EPA Contract Laboratory Program Statement of Work for Organic Analysis, SOM01.2 (amended Apr. 2007).
- (z) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2008), available at <https://www.epa.gov/geospatial/geospatial-policies-and-standards> and <https://www.epa.gov/geospatial/epa-national-geospatial-data-policy>.
- (aa) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).
- (bb) Principles for Greener Cleanups (Aug. 2009), available at <https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups>.
- (cc) Providing Communities with Opportunities for Independent Technical Assistance in Superfund Settlements, Interim (Sep. 2009).
- (dd) EPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration), ISM01.2 (Jan. 2010).
- (ee) Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).
- (ff) Groundwater Road Map: Recommended Process for Restoring Contaminated Groundwater at Superfund Sites, OSWER 9283.1-34 (July 2011).
- (gg) Recommended Evaluation of Institutional Controls: Supplement to the “Comprehensive Five-Year Review Guidance,” OSWER 9355.7-18 (Sep. 2011).
- (hh) Construction Specifications Institute’s MasterFormat (latest version), available from the Construction Specifications Institute, <http://www.csinet.org/masterformat>.
- (ii) Updated Superfund Response and Settlement Approach for Sites Using the Superfund Alternative Approach, OSWER 9200.2-125 (Sep. 2012)
- (jj) Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012).
- (kk) Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012).

- (ll) EPA's Emergency Responder Health and Safety Manual, OSWER 9285.3-12 (July 2005 and updates), [https://www.epaossc.org/\\_HealthSafetyManual/manual-index.htm](https://www.epaossc.org/_HealthSafetyManual/manual-index.htm).
- (mm) Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).
- (nn) Guidance for Evaluating Completion of Groundwater Restoration Remedial Actions, OSWER 9355.0-129 (Nov. 2013).
- (oo) Groundwater Remedy Completion Strategy: Moving Forward with the End in Mind, OSWER 9200.2-144 (May 2014).

**8.2** A more complete list may be found on the following EPA Web pages:

Laws, Policy, and Guidance: <https://www.epa.gov/superfund/superfund-policy-guidance-and-laws>.

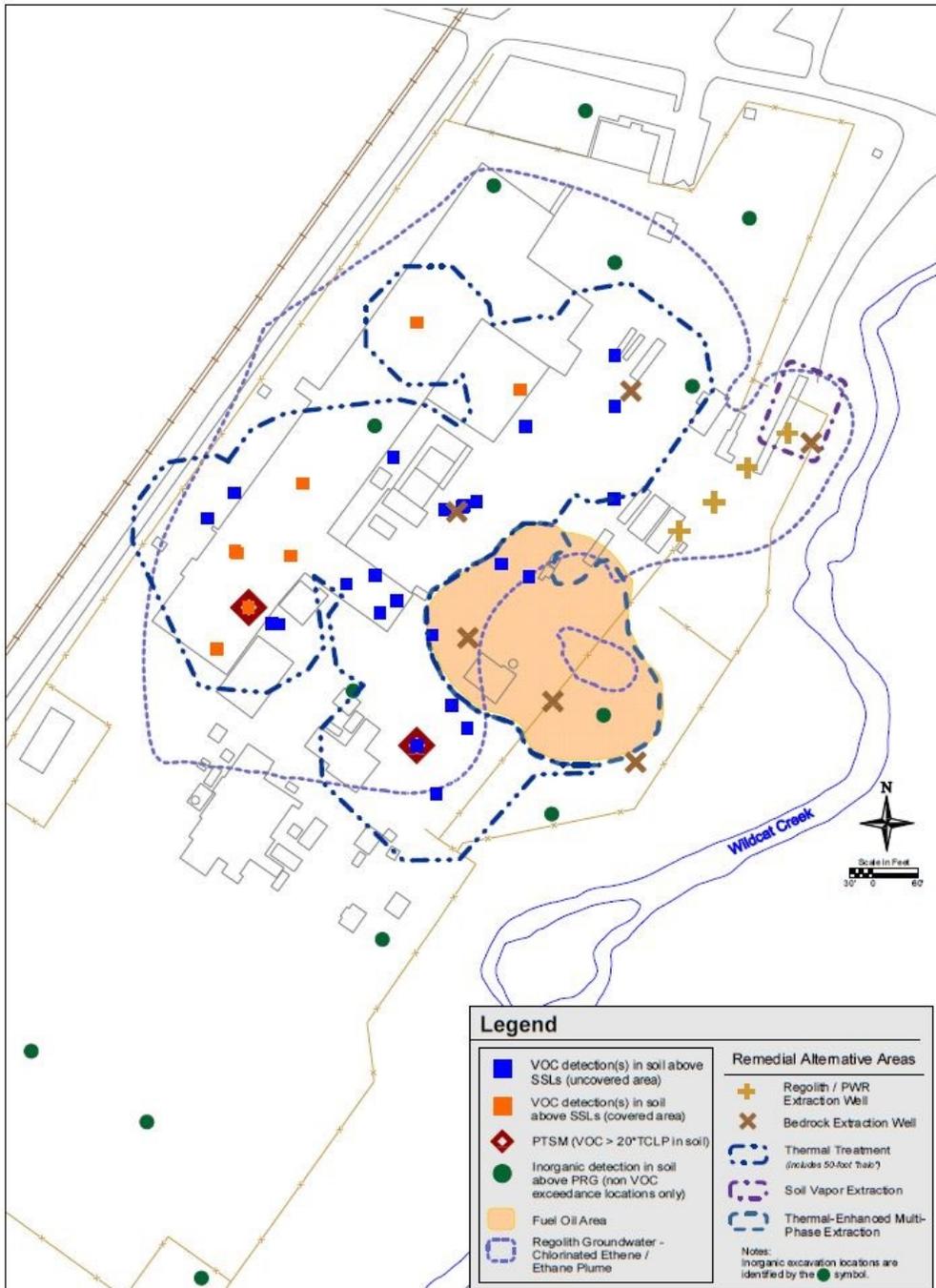
Test Methods Collections: <https://www.epa.gov/measurements/collection-methods>

**8.3** For any regulation or guidance referenced in the Consent Decree or SOW, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after the Work Parties receive notification from the Department of the modification, amendment, or replacement.

STATEMENT OF WORK

ATTACHMENT A

**Figure 5-6 of the  
Record of Decision and Feasibility Study**



SSL - Soil Screening Level with Chloride Attenuation Factor (DAF) of 7 in uncovered areas and DAF of 100.3 in covered areas.  
 PRG - Preliminary Remediation Goal for industrial soil.  
 PTSM - Principal Threat Source Material, defined as 20 \* EPA toxicity criteria (i.e., TCPLP).

**Figure 5-6**  
**Combination Alternative 3 Locations**  
 Feasibility Study Report  
 Former PSC Site - Rock Hill, SC



STATEMENT OF WORK

ATTACHMENT B

“Source Area” Figure Provided by the Department on March 26, 2018

(Source Areas highlighted in blue for clarity)

